

## **Visual Programming of XSLT from examples**

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**Abstract.** Vishnu is a tool for XSLT visual programming in Eclipse - a popular and extensible integrated development environment. Rather than writing the XSLT transformations, the programmer loads or edits two document instances, a source document and its corresponding target document, and pairs texts between them by drawing lines over the documents. This form of XSLT programming is intended for simple transformations between related document types, such as HTML formatting or conversion among similar formats.

Complex XSLT programs involving, for instance, recursive templates or second order transformations are out of the scope of Vishnu. We present the architecture of Vishnu composed by a graphical editor and a programming engine. The editor is an Eclipse plug-in where the programmer loads and edits document examples and pairs their content using graphical primitives. The programming engine receives the data collected by the editor and produces an XSLT program. The design of the engine and the process of creation of an XSLT program from examples are also detailed. It starts with the generation of an initial transformation that maps source document to the target document.

This transformation is fed to a rewrite process where each step produces a refined version of the transformation. Finally, the transformation is simplified before being presented to the programmer for further editing.

**Keywords:** XML, XSL Transformations, Second order.